

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

DESCRIPTIONS OF SOME UNDESCRIBED FORMS OF
SCHIZOLACHNUS WITH KEY TO SPECIES FOUND
IN THE UNITED STATES (APHIDAE)

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Three of the forms described here, belong to recently published species, which are treated in a key and figured for the first time.

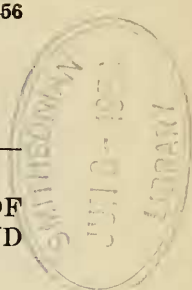
Schizolachnus curvispinosus H.E.K.

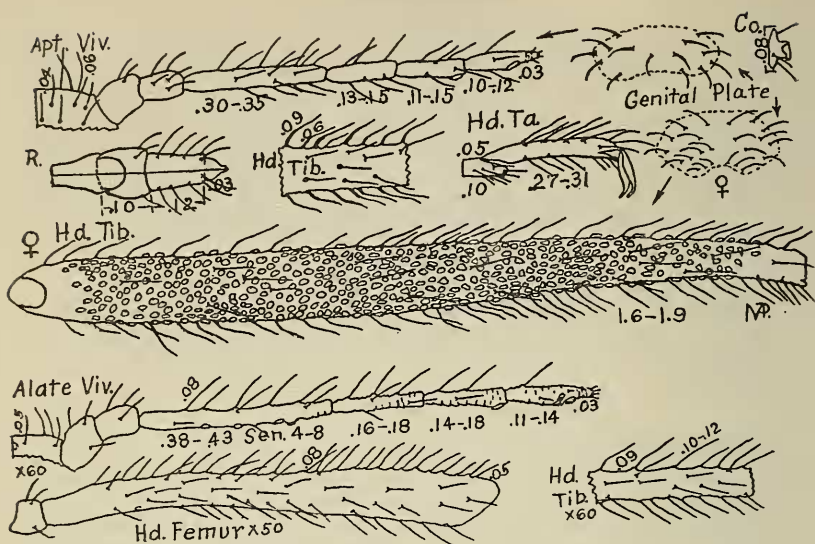
Alate viviparous female.

Length varying from 2.40-4.00 mm. Color notes not taken from living specimens. Cleared mounted specimens similar to those of apterous viviparous females. Length of antennal segments as follows: III .375-.45 mm., IV .16-.18 mm., V .14-.195 mm., VI .11-.14 + .03 mm. Sensoria distributed as follows: III 4-9 arranged in an irregular row which in one or two cases is partly double. All sensoria on the third segment small and slightly tuberculate, the primary sensorium on this segment is absent. IV with neither secondary or primary sensoria. V with primary sensorium only. Hair on antennal segments sparse, on third segment almost always absent on posterior margin or nearly so, varying in length from .045-.08 mm. with the longest hairs on the anterior margin roughly equal to width of segment. Antennal hairs almost straight, never strongly bent, at most with a slight curve. Fifth and sixth antennal segments weakly imbricated. Lateral lobes of thorax with few hairs, these confined for the most part to the inner regions along the median margin. Posterior median lobe of thorax with very few hairs. Costal margin of forewing fuscous, radial sector fuscous with border, cubital and anal veins pale fuscous. Media twice branched, very pale. Hind femora varying from 1.125-1.20 mm., provided with numerous coarse slightly curved hairs about .105 mm. in length, these are only slightly curved as a rule and are never strongly bent as in the apterous females. First segment of the hind tarsus varying from .09-.105 mm., second tarsus .33 mm. long.

Dorsum of abdomen with numerous spine-like hairs which are roughly grouped in irregular bands. Hairs on ventral surface of abdomen slightly longer, less spine-like. Cornicles as in apterous females. Cauda with surface slightly setulose, with hairs distributed over entire surface, the shortest and finest being near the middle of the cauda.

Morphotype alate viviparous female, deposited in the United States National Museum. Host *Pinus ponderosa*. Mead Township, Spokane Co. Washington. G. F. Edmunds Jr. & R. K. Allen collectors. June 14, 1955.





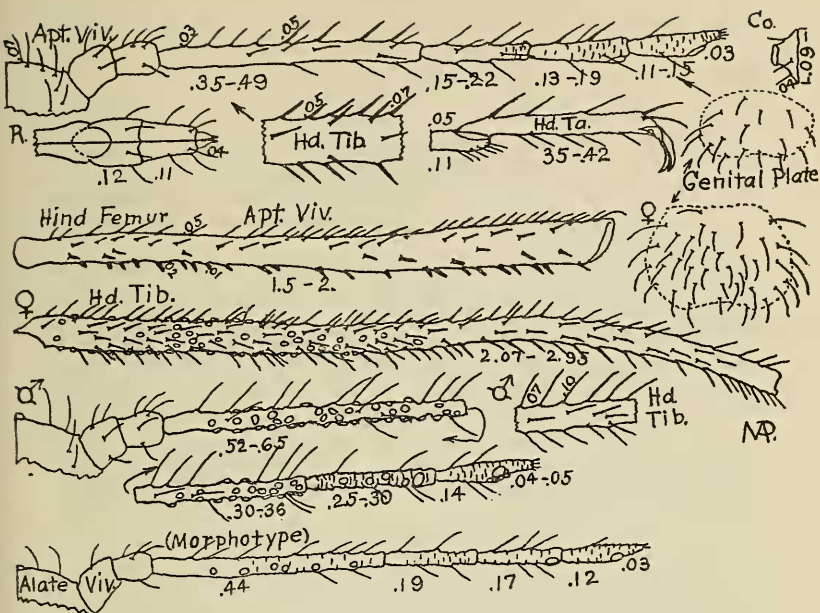
Schizolachnus curvispinosus HEK

Schizolachnus wahlea H.

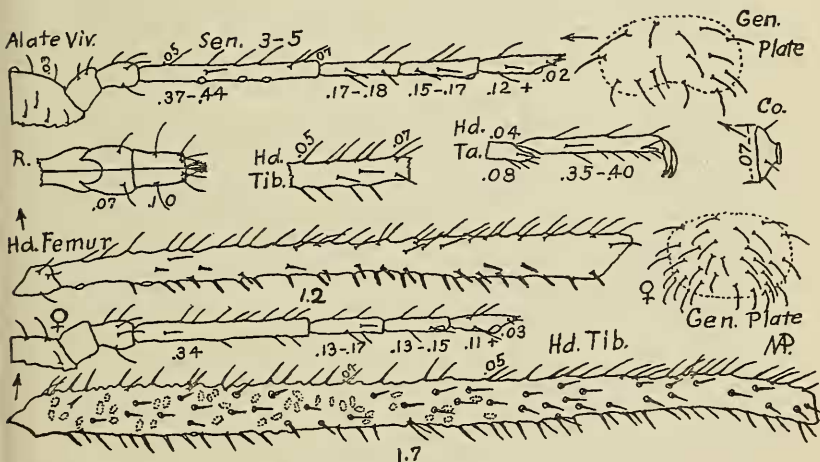
Alate viviparous female.

Length from vertex to end of anal plate varying from 1.65-2.10 mm. Color and distribution of powder similar to that of apterous viviparous female. Length of antennal segments as follows: III .42-.45 mm., IV .18-.19 mm., V .165-.185 mm., VI .105-.12 + .03 mm. Sensoria distributed as follows: III four to six secondary sensoria, these are more or less in a row and are always small, the primary sensorium is present on this segment. The fourth antennal segment is without sensoria. The fifth antennal segment has only the primary sensorium present. Hair on antennal segments sparse inclined at an angle of about forty-five degrees, the ratio of length to width of third segment in mid region 4-3, ratio of length to width of same segment in apical region 5-3, all hair spine-like. Ocular tubercles present but poorly developed. Rostrum reaching to or slightly beyond mesothoracic coxae. Median suture of head narrow and dark brown. Media exceedingly faint, hardly recognizable and has to be looked for, second branch of media either absent or exceedingly faint and shorter than normal, and not united with media. Anal and cubital veins dark, slightly bordered. Metathoracic femora varying from 1.50-1.80 mm. Metathoracic tibiae varying in length from 2.55-2.82 mm. Hairs on tibiae and femora similar to those of apterous viviparous female. First metatarsal segment varying from .36-.405 mm. Cornicles and cauda as in apterous viviparous female.

Morphotype alate viviparous female. Reared on *Pinus ponderosa*



Schizolachnus wahlea H.



Schizolachnus tusoca H.&W.

Grand Junction, Colorado, from material taken from tree which produced the holotype. This slide has been deposited in the United States National Museum. Only three specimens of this form have been taken.

Schizolachnus tusoca H.&W.

Oviparous female.

Length from vertex to end of anal plate 2.32 mm. Antennal segments with the following lengths: III .33 mm., IV .15 mm., V .135 mm., VI .09 + .03 mm. Hind femora 1.2 mm., hind tibiae 1.7 mm. Sensoria on hind tibiae numerous, confined to basal half of segment more or less. Rostrum just reaching mesothoracic coxae. Other features as in viviparous female.

Morphotype oviparous female, *Pinus ponderosa* Catalina Mts. Tucson, Arizona, Nov. 27, 1954. G. D. Butler Jr. Deposited in the United States National Museum.

When *S. wahlea* was described, it was stated that it was closely allied to *S. tusoca*. Now that I have seen living forms of both species this statement can be emphasized. In life the two species look alike. Mounted specimens differ in size, length of antennal segments, femora, tibiae and tarsi. The media of the fore wings also differ. Studies should be made on these two species to determine the influence of environment on those factors which have been used to separate them.

Key to American Species of *Schizolachnus*.

1. Hairs on ventral surface of hind femora short, coarse, peg-like.....2
 Hairs on ventral surface of hind femora not short, or peg-like.....3
2. Hind femora 1.5-2 mm. in length, first tarsal segment .11 mm. in length, hind tibiae of oviparous female 2.07-2.95 mm. in length.
 *S. wahlea* H.
 Hind femora 1.2 mm. in length, first tarsal segment of hind tarsus .08 mm. long, hind tibiae of oviparous female 1.7 mm. long.*S. tusoca* H&W
3. Hair on hind tibiae long, and fine, longer than .12 mm. in apterous forms not bent.4
 Hair on hind tibiae coarse, less than .11 mm. in length, in apterous forms strongly bent, in alate forms almost straight or weakly bent, dorsum of abdomen with short spine-like hairs.*S. curvispinosus* H.E.K.
4. Hind tibiae slender, long, black, hind tarsal segment II .30-.37 mm. long.*S. pini-radiatae* (D.)
 Hind tibiae thick, short, with some pale yellow, hind tarsal segment II .25-.28 mm. in length.*S. pineti* (F.)